



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

WILLIAM K. WARBURTON et al.

Application No.: 10/690,470

Filed: October 20, 2003

For: **METHOD AND APPARATUS FOR
IMPROVING RESOLUTION IN
SPECTROMETERS PROCESSING
OUTPUT STEPS FROM NON-IDEAL
SIGNAL SOURCES**

Examiner: Unassigned

Art Unit: 2857

**INFORMATION DISCLOSURE
STATEMENT UNDER
37 CFR §1.97 and §1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date Submitted: April 19, 2004

Sir:

The references cited on attached form PTO/SB/08B are being called to the attention of the Examiner. The above-referenced application is a continuation-in-part of U.S. Patent App. No. 10/429,170, filed May 1, 2003, (Attorney Docket No. 017032-000520US) which is a continuation of U.S. Patent App. No. 09/643,705, now U.S. Patent No. 6,587,814 (Attorney Docket No. 017032-000510US). Applicants are providing copies of publications 22 through 31 for the Examiner's convenience. At the Examiner's request, Applicants will gladly supply copies of the U.S. patent references.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Respectfully submitted,



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APR 26 2004

PTO/SB/08B (08-03)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	1	of	2	Application Number	10/690,470
				Filing Date	October 20, 2003
				First Named Inventor	Warburton, William K.
				Art Unit	2857
				Examiner Name	Unassigned
				Attorney Docket Number	017032-000511US

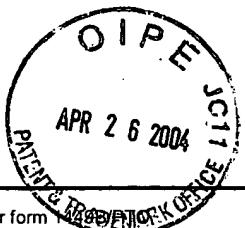
U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	1	US-4,314,343	02/02/1982	Tomlinson	
	2	US-4,529,308	07/16/1985	Rife	
	3	US-4,554,633	11/19/1985	Glover et al.	
	4	US-4,727,256	02/23/1988	Kumazawa	
	5	US-4,853,538	08/01/1989	Jackson	
	6	US-4,893,018	01/09/1990	Saitou	
	7	US-4,937,452	06/26/1990	Simpson et al.	
	8	US-4,968,889	11/06/1990	Hartwell et al.	
	9	US-5,021,664	06/04/1991	Hinshaw	
	10	US-5,132,963	07/21/1992	Ungerboeck	
	11	US-5,347,129	09/13/1994	Miller et al.	
	12	US-5,347,129	09/13/1994	Miller et al.	
	13	US-5,684,850	11/04/1997	Warburton	
	14	US-5,774,522	06/30/1998	Warburton	
	15	US-5,821,533	10/13/1998	Bingham et al.	
	16	US-5,872,363	02/16/1999	Bingham et al.	
	17	US-5,873,054	02/16/1999	Warburton et al.	
	18	US-5,889,869	03/30/1999	Botros et al.	
	19	US-6,310,349	10/30/2001	Wong et al.	
	20	US-6,374,192	04/16/2002	Brogue et al.	
	21	US 6,587,814	07/01/2003	Warburton et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³			
	22	JP	2000316072	11/14/2000	Kano et al.
					<input type="checkbox"/> T ⁶

Examiner Signature	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



<p>Substitute for form <i>1000</i> (Rev. 10-2000)</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>		Complete if Known	
		Application Number	10/690,470
		Filing Date	October 20, 2003
		First Named Inventor	Warburton, William K.
		Art Unit	2857
		Examiner Name	Unassigned
Sheet	2	of	2
		Attorney Docket Number	

NON PATENT LITERATURE DOCUMENTS

NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	23	Aalseth et al., "Using pulse shape discrimination to sort individual energy deposition events in a germanium crystal", Journal of Radioanalytical and Nuclear Chemistry, Vol.233, Nos 1-2 (1998) 119-123.	
	24	Goulding et al., "Ballistic Deficit Correction in Semiconductor Detector Spectrometers", I.E.E.E: Trans. Nuclear Science, Vol. 35, No. 1, (1988) 119-124.	
	25	Knoll, Glenn F., "Radiation Detection and Measurement, 2nd Ed." (J. Wiley, New York, 1989)	
	26	Radeka, V., "Trapezoidal Filtering of Signals from Large Germanium Detectors at High Rates", I.E.E.E. Trans. Nuclear Science, Vol. NS-19 (1982) 412-428.	
	27	Raudorf et al., "Pulse Shape and Risetime Distribution Calculations for HPGe Coaxial Detectors", I.E.E.E. Trans. Nuclear Science, Vol. NS-29, No. 1 (1982) 764-768.	
	28	Skulski et al., "Particle identification in CsI(Tl) using digital pulse shape analysis," Nuclear Instruments and Methods in Physics Research, A458 (2001) 759-771	
	29	Stahle et al., "Design and performance of the Astro-E/XRF microcalorimeter array and anti-coincidence detector", in Proc. of the SPIE No. 3765, "EUV, X-ray and Gamma-ray Instrumentation for Astronomy X" (Denver, CO, July 21-23, 1999), in press.	
	30	Takahashi et al., "A Multiparametric Waveform Analysis of GE Detector Signal Based on Fast ADC Digitizing Technique", I.E.E.E. Trans. Nuclear Science, Vol. 41, No.4, (1994) 1246-1249.	
	31	White, G., "Pulse Processing for Gamma Ray Spectrometry: a Novel Method and its Implementation", I.E.E.E. Trans. Nuclear Science, Vol. 35, No. 1, (1988) 125-130.	

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